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WHAT IS CLAIMED IS:

1. A method of terminating and creating a synchronous transport signal, comprising steps of:

     receiving an inbound synchronous transport signal;

     extracting an inbound synchronous payload envelope of the inbound synchronous transport signal;

     mapping embedded signals within the inbound synchronous payload envelope into an inbound matrix payload envelope format;

     generating an inbound matrix transport format from the inbound matrix payload envelope format, the inbound matrix transport format carrying embedded signals for cross-connection to appropriate destinations.

2. The method of Claim 1, further comprising:

     isolating DS-1 network signals from the inbound synchronous payload envelope;

     placing the DS-1 network signals into the inbound matrix payload envelope format.

3. The method of Claim 1, further comprising:

     generating DS-3 network signals from the inbound synchronous payload envelope;

     isolating DS-1 network signals from the DS-3 network signals;

     placing the DS-1 network signals into the inbound matrix payload envelope format.

4.   The method of Claim 2, further comprising:

performing fault isolation on the DS-1 network
signals.

5.   The method Claim 1, further comprising:

locking the inbound synchronous payload envelope to
a frequency of the inbound synchronous transport signal.

6.   The method of Claim 1, further comprising:

locking the inbound matrix payload envelope format
to a wideband timebase.

7.   The method of Claim 1, further comprising:

receiving an outbound matrix transport format and
corresponding clock signals;

converting the outbound matrix transport format into
an outbound matrix payload envelope.

8.   The method of Claim 7, further comprising:

converting the outbound matrix payload envelope into
an outbound synchronous payload envelope;

generating an outbound clock signal corresponding to
the outbound synchronous payload envelope.

9.   The method of Claim 8, further comprising:

converting the outbound synchronous payload envelope
into an outbound synchronous transport signal;

generating a network clock signal corresponding to
the outbound synchronous transport signal;

transmitting the outbound synchronous transport
signal with the network clock signal.

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10. The method Claim 7, further comprising:

desynchronizing DS-1 network signals from the outbound matrix payload envelope.

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11. The method of Claim 10, further comprising:

placing the desynchronized DS-1 network signals into the outbound matrix payload envelope.

12. The method of Claim 10, further comprising:

10   converting the desynchronized DS-1 signals into corresponding DS-3 network signals.

13.   A method of terminating and creating a synchronous transport signal, comprising steps of:

receiving an inbound synchronous transport signal;

extracting an inbound synchronous payload envelope from the inbound synchronous transport signal;

mapping the inbound synchronous payload envelope into an inbound synchronous transfer mode signal;

extracting plesiochronous digital hierarchy signals from the inbound synchronous transfer mode signal;

placing the plesiochronous digital hierarchy signals into a plurality of channels having a matrix payload envelope signal format;

multiplexing the plurality of channels;

converting the multiplexed plurality of channels into matrix transport signals;

serially transmitting the matrix transport signals.

14.   The method of Claim 13, further comprising:

processing   lower   rate   components   of   the plesiochronous   digital   hierarchy   signals   prior   to placement into the plurality of channels.

15.   The method of Claim 13, further comprising:

processing thirty-four megabit components of the plesiochronous digital hierarchy signals.

16.   The method of Claim 13, further comprising:

processing one hundred forty megabit components of the plesiochronous digital hierarchy signals.

17.   The method of Claim 16, further comprising:

demultiplexing and desynchronizing the one hundred forty megabit components into thirty-four megabit components.

18.   The method of Claim 13, further comprising:

directly converting the inbound synchronous transport signals into separate matrix payload envelope formats;

multiplexing the separate matrix payload envelope formats into byte interleaved parallel form.

19.   The method of Claim 13, further comprising:

locking the inbound synchronous payload envelope to a frequency of the inbound synchronous transport signal.

20.   The method of Claim 13, further comprising:

locking the matrix payload envelope signal format to a wideband timebase.